

Jet Propulsion Laboratory

INTEROFFICE MEMORANDUM

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December 14, 2004

TO: A. M. Bhanji / R.W. Sible

FROM: E. S. Burke

SUBJECT: Minutes for the DSS-65 Downtime Readiness Review (DTRR) held December 14, 2004.

DSS-65 Downtime Readiness Review

The DSS-65 Downtime Readiness Review (DTRR) was held on December 14, 2004 at JPL in Building 238-543 with Madrid staff participating to evaluate the readiness to begin the Relocation and Re-commissioning, Antenna Controller Replacement (ACR) and Microwave Subsystem Controller (USC).

The board unanimously approved the DSS-65 downtime as planned.

Review Board

Gene Burke, Chairman	DSN RAPSO Manager
Dennis Buck	Antenna Front End & Science Support Manager, Office 923
Jim Buckley	Service Management Office Representative, Office 921
Dave Recce	Infrastructure, Verification & Validation Office Representative, Office 924
Sherill Hampton	ITT, O&M Contractor Engineering Manager
Jean Patterson	Division 33 Representative to IND
Jesus Gimeno	MDSCC Representative, Systems Engineering
Pablo Perez-Zapardiel	MDSCC Representative, Antenna Engineering
Fred Battle	DSMS Safety Engineer
Art Andujo	Board Secretary

Introduction – *G. Burke*

The Downtime Readiness Review Board was introduced and the Process Definition was reviewed.

DSS-65 Downtime Overview – *J. Cucchissi*

The DTRR will review and assess the readiness for all activities planned for the tasks scheduled to occur between January 31, 2005 and July 3, 2005. At this time there are no major issues preventing the relocation or the USC task from taking place, there is though a problem with the ACR software problems being experienced that would prevent the Antenna Controller Replacement task from taking place.

Associated Tasks

There are other associated tasks that have been scheduled to occur during the downtime period and have been included in the integrated schedule. They are the NSP 5.5 Downlink testing task, the new weather station installation, MDSCC installation of pre-existing LNA ECO Modkits. Madrid assured the board that the associated tasks would be unobtrusive to the major tasks.

Review Scope

The scope of this review was limited to discuss the three major tasks planned during the downtime; the relocation task, the Antenna Controller Replacement task (H/W only) and the Microwave Subsystem Controller task. The ACR software readiness will be reviewed separately.

Dependencies

Due to several issues with the ACR software it will become necessary to wait for the satisfactory resolution to those issues before beginning work on the DSS-65 ACR task. The hardware to be installed for this task requires the ACR software. Another dependency for the ACR installation is the NSP Downlink software. It is planned to install NSP version 5.5. A DDR is scheduled to approve the NSP 5.5 software for usage on February 02, 2005. If NSP 5.5 is unavailable for installation the complex will use version 4.1.3. Neither of the major tasks are dependant on each other, therefore if any one task is not approved or is not carried out, the other tasks will be unaffected. New support files are required to be delivered to NSS, however if the ACR task is not done it will become necessary to revert to previous NSS support files.

Agenda/Schedule:

- Antenna Relocation Task Summary*John Cucchissi*
- Antenna Mechanical and Structural Modifications*Asim Sehic*
- Microwave Subsystem Controller Upgrade.....*Leslie Manalo*
- Operations Test Plan.....*Gil Roldan*
- Integrated Downtime Schedule.....*John Cucchissi*
.....*Ken Bartos*
- Discussion.....*DTRR Board*

Refer to the following site for a detailed set of meeting minutes, presentation materials and RFA/Action items: <http://rapweb.jpl.nasa.gov/DTRR.html>

DTRR Summary

It has been determined that the DSS-65 downtime tasks discussed have adequately been prepared and should proceed as planned. There are however some issues requiring additional preparation or resolution prior to the downtime and have been documented through RFA's.

The only concern at this time is the readiness of the Antenna Controller Software, but the plan to forego the ACR hardware installation if software issues have not been satisfactorily resolved is acceptable to the review board. A mini review will be held to determine the readiness of the ACR software.

Board Summary

The Board reviewed each of the success criteria following the presentation and taking under consideration the deviations it is recommended that DSS-65 begin its downtime as planned. Comments provided by each of the Board Members follow:

Jim Buckley – Proceed with the downtime. He agrees that it is necessary to proceed with the downtime as the relocation plan seems complete and that the ACR work should not interfere with those plans. Although there are some questions from the safety engineer it is felt that these issues are easily resolved.

Dave Recce – Proceed with the downtime. All the work that has been done is impressive particularly the contingency plan for the ACR work.

Sherill Hampton – Proceed with the downtime. The relocation work is definitely ready to proceed, but there are some concerns with the dependency on the NSP 5.5 testing that may cause delays and the issues with the ACR task.

Jean Patterson – Proceed with the downtime. There are some minor issues that should be resolved with the safety report and the spares.

Jesus Gimeno – Proceed with the downtime. Considering that this review is being held two weeks earlier than usual it is difficult to confirm the arrival of many required materials. Confident with the relocation and USC tasks as well as the contingency plan for the ACR task.

Pablo Perez-Zapardiel – Proceed with the downtime. Happy with the relocation and the USC task, but would like an RFA to clarify what needs to be done to the Mark IV controllers in case the ACR task is not performed specifically what is the plan for updating the ACS with the new antenna latitude and longitude information to the EPROM's.

Fred Battle – Proceed with the downtime. Very good safety plan but the wind speed tolerance limits for the antenna while on the trailers needs to be included.

Gene Burke – Proceed with the downtime. The relocation and USC tasks seem well prepared to proceed, but the ACR will need to be monitored. Any extensions need to be brought to the attention of the board as soon as possible.